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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	1 TETO DA VIEN DO GUERNA	
10/724,925	12/01/2003	THE THINKED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
		Joseph Thorman	API-1027-US(COS-935)	3266
	1590 12/15/2004		EXAMINER	
FINA TECHNOLOGY INC			CHOI, LING SIU	
PO BOX 6744			CHOI, LI	NG SIU
HOUSTON, T	X 77267-4412		ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/724,925	THORMAN, JOSEPH	
Cince Action Summary	Examiner	Art Unit	
The MAN INC. DATE: 54	Ling-Siu Choi	1713	
The MAILING DATE of this communi	cation appears on the cover sheet wit	h the correspondence address	
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNION - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum states a specified above is less than thirty (30) - Failure to reply within the set or extended period for reply within the set or extended per	CATION. of 37 CFR 1.136(a). In no event, however, may a rejunication. of adys, a reply within the statutory minimum of thirty tutory period will apply and will expire SIX (6) MONT	oly be timely filed (30) days will be considered timely. HS from the mailing date of this communication.	
Status			
1) Responsive to communication(s) filed	t on		
/ <u>^ \</u>	b)⊠ This action is non-final.		
3) Since this application is in condition for	Or allowance except for formal matter	or procedution as to the second	
closed in accordance with the practic	e under Ex parte Quavle 1935 C D	s, prosecution as to the ments is	
Disposition of Claims	, and dayle, 1000 0.B.	11, 433 O.G. 213.	
4)⊠ Claim(s) <u>1-30</u> is/are pending in the ap	plication		
4a) Of the above claim(s) <u>18-30</u> is/are			
5) Claim(s) is/are allowed.	william rom consideration.		
6) Claim(s) <u>1-17</u> is/are rejected.			
7) Claim(s) is/are objected to.			
	on and/on all ating		
8) Claim(s) are subject to restriction Application Papers	on and/or election requirement.		
9) The specification is objected to by the	Examiner.		
10) The drawing(s) filed on <u>01 December 2</u>	2003 is/are: a) \square accepted or b) \boxtimes o	bjected to by the Examiner.	
Applicant may not request that any objection	on to the drawing(s) be held in abevance	. See 37 CFR 1 85(a)	
Replacement drawing sheet(s) including the	ne correction is required if the drawing(s)	is objected to Soc 27 CED 4 404(1)	
11) The oath or declaration is objected to b	y the Examiner. Note the attached O	ffice Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:	foreign priority under 35 U.S.C. § 11	9(a)-(d) or (f).	
1. Certified copies of the priority do	cuments have been received		
2. ☐ Certified copies of the priority do	cuments have been received in Appl	ication No	
 Copies of the certified copies of the certified copies of the certified copies. 	the priority documents have been rec	eived in this National Stage	
application from the international	Bureau (PCT Rule 17.2(a))		
* See the attached detailed Office action for	or a list of the certified copies not rec	eived.	
Attachment(s)	•	•	
1) Notice of References Cited (PTO-892)	4) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(PTO 442)	
2) Motice of Draftsperson's Patent Drawing Review (PTO-	4) Interview Sumn 948) Paper No(s)/Ma	nary (P1O-413) iil Date	
3) Information Disclosure Statement(s) (PTO-1449 or PTC Paper No(s)/Mail Date 12/01/03.	D/SB/08) 5) Notice of Inform	nal Patent Application (PTO-152)	
S. Patent and Trademark Office	6)		

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DETAILED ACTION

Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17, drawn to a process to polymerize propylene monomer, classified in class 526, subclass 124.3.
 - II. Claims 18-24, drawn to a catalyst, classified in class 502, subclass 103.
 - III. Claims 25-30, drawn to polypropylene, classified in classn 526, subclass351.
- 2. The inventions are distinct, each from the other because of the following reasons:

 Inventions II and I are related as product and process of use. The inventions can
 be shown to be distinct if either or both of the following can be shown: (1) the process for
 using the product as claimed can be practiced with another materially different product or
 (2) the product as claimed can be used in a materially different process of using that
 product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a
 materially different process of using that product such as in a process of isomerization or
 hydrogenation.

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP

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§ 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as a process using metallocene,

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions relate to a catalyst and polypropylene.

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mr. David Mossman on November 8, 2004, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Claim Objections

6. Claim 12 is objected to because of the following informalities: claim 12, line 6, "halogen or a hydrocarboxyl" is suggested to be changed to --halogen and a hydrocarboxyl--

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 12-13; claim 12, lines 19-20, the recitation "the organoaluminum compound" causes indefiniteness because there are two organoaluminum compounds are used in the contacting steps.

Claims 5-6, line 1; claims 15-16, line 1, the recitation "the organoaluminum compound" causes indefiniteness because it is not clear which organoaluminum it implies.

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9. This application contains allowable subject matter (claims 1-17) because the prior art of record, either alone or in combination, fails to teach or suggest the use of the particularly claimed ester electron donor claimed herein. The closest prior art is Hara et al. (US 5,489,634).

The present invention relates to a process for propylene polymerization, comprising

providing a Ziegler-Natta catalyst, and in any order:
contacting the catalyst with an organoaluminum compound;
contacting the catalyst with at least one electron donor comprising a di-sec-
butyldialkoxysilane simultaneously with or subsequent to contacting the catalyst with
an organoaluminum compound
introducing the catalyst into a polymerization reaction zone containing
the organoaluminum compound, at least one electron donor, and propylene monomer
removing propylene homopolymer or copolymer from the polymerization reaction zone

(summary of claim 1)

Hara et al. disclose a process to prepatre a stereospecific polyolefin in the presence of a catalyst comprising (A) a catalyst component prepared by contacting (a) metal magnesium /2-ethylhexanol, tris-i-propoxyaluminum, and titanium tetra-n-butoxide with (b) isobutyl aluminum dichloride to obtain a solid product, and further reacting with this solid product (c) diisobutyl phthalate (or ethyl benzoate) and titanium tetrachloride to obtain a solid catalyst component, and further reacting with this solid catalyst component (d) triethyl aluminum and an oxygen-containing organic compound of silicon of the

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formula t-Bu(n-Bu)Si(OM)₂, (B) triethyl aluminum, and (C) an electron-donative

compound of the formula of diisobutyldimethoxysilane (claim 1). However, Hara et al.

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do not teach or fairly suggest a process for olefin polymerization in the presence of a

catalyst comprising di-sec-butyldialkoxysilane as an internal electron donor.

If the non-elected claim is canceled and the hereinabove rejections under 35 USC

112 and objection are obviated, the application could be passed to issue.

Conclusion

10. Figures 1-3 are objected because the lines for DIBDS are not clear and the

figures are not bounded.

11. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wu, can be reach on 571-272-1114.

LING-SUI CHOI PRIMARY EXAMINER

December 10, 2004